

Claims

1. A kit for use in the screening of the risk for, the diagnosis, management and research of atherosclerosis and coronary heart disease comprising

-means for isolating LDL from a serum or plasma sample for the preparation of a LDL

5 fraction, and

-means for separating the lipids from the LDL fraction to obtain a lipid fraction.

2. The kit according to claim 1, wherein the means for isolating the LDL from the serum or plasma sample is a buffered heparin solution.

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3. The kit according to claim 1, wherein the means for separating the lipid is a chloroform-methanol solution.

4. The kit according to claim 1, further comprising a means for use in the determination of the baseline level of conjugated dienes (LDL-BDC) in the lipid fraction.

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5. The kit according to claim 4, wherein the means for use in the determination of LDL-BDC in the lipid fraction is an organic solvent.

6. The kit according to claim 4, wherein the means for use in the determination of LDL-BDC in the lipid fraction is cyclohexane.

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7. A kit for use in the screening of the risk for, the diagnosis, management and research of atherosclerosis and coronary heart disease comprising

25 means for isolating LDL from a serum or plasma sample for the preparation of a LDL fraction, and

means for use in the determination of the antioxidant potential of LDL (LDL-TRAP) in the LDL fraction

is a buffered heparin solution.

9. The kit according to claim 7, wherein the means for use in the determination of the antioxidant potential of LDL in a serum or plasma sample is 2,2'-azobis(2-amidinopropane)HCl (ABAP).

5 10. A kit for use in the screening of the risk for, the diagnosis, management and research of atherosclerosis and coronary heart disease comprising
means for isolating LDL from a serum or plasma sample for the preparation of a LDL fraction,

means for separating the lipids from the LDL fraction to obtain a lipid fraction,

10 means for use in the determination of LDL-BDC in the lipid fraction, and

means for use in the determination of LDL-TRAP in the LDL fraction.

11. The kit according to claim 10, wherein the means for isolating the LDL from the serum or plasma sample is a buffered heparin solution.

12. The kit according to claim 10, wherein the means for separating the lipid is a chloroform-methanol solution.

13. The kit according to claim 10, wherein the means for use in the determination of LDL-BDC in the lipid fraction is an organic solvent.

14. The kit according to claim 13, wherein the means for use in the determination of LDL-BDC in the lipid fraction is a cyclohexane.

15. The kit according to claim 10, wherein the means for use in the determination of the antioxidant potential of LDL is the sample is 2,2'-azobis(2-amidinopropane)HCl (ABAP).

16. A kit for use in quantifying oxidation parameters of lipids in a LDL fraction of blood

containing a solvent which extracts lipids from a LDL fraction; and

a second container containing an amount of resuspension solvent sufficient to resuspend the extracted lipids.

17. The kit according to claim 16, wherein the solvent which extracts lipids is
5 chloroform:methanol having a ratio greater than about 2:1.
18. The kit according to claim 17, wherein the resuspension solvent in the second container is neutral or inert to spectrophotometric analysis.
- 10 19. The kit according to claim 18, wherein the resuspension solvent in the second container is cyclohexane.
20. A kit for use in determining antioxidant potential of a LDL fraction of blood serum or plasma, comprising
15 a first container for extracting lipids from the LDL fraction, the first container containing a solvent which extracts lipids from a LDL fraction; and
a second container containing an amount of a compound which produces peroxy radicals sufficient to induces lipid peroxidation of the LDL fraction.
- 20 21. The kit according to claim 20, wherein the compound in the second container is 2,2' - azobis(2-amidinopropane)HCl (ABAP).
22. The kit of claim 21, wherein the ABAP is a powder and further comprising a third container containing a solution for suspension of the ABAP.
- 25 23. The kit of claim 21, further comprising a third container containing a compound which enhances luminescence.
25. A kit for isolation of LDL from a blood or serum sample, comprising
a container containing a buffered heparin solution, and

instructions for adding a sufficient quantity of the buffered heparin solution to the blood or serum sample to form a LDL precipitate, mixing the mixture gently, and centrifuging the resulting mixture for at least 20 minutes to recover the LDL precipitate.